

REMARKS

This amendment responds to the Office Action dated April 21, 2008, in which the Examiner rejected claims 20-40 under 35 U.S.C. § 103.

As indicated above, claims 20 and 32 have been amended in order to make explicit what is implicit in the claims. The amendment is unrelated to a statutory requirement for patentability.

Applicants respectfully request the Examiner hold in abeyance the requirement for filing a certified English translation of the priority document until the scope of the claims is known. In particular, Applicants respectfully submit that a certified English translation of the priority document is not necessary due to the amendments made to claims 20 and 32.

Claims 20 and 32 claim a data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over communication channels and for causing the data transmission means to encrypt data and transmit the encrypted data to the data receiving means over the communication channels. The data transmission control method comprises the steps of first encapsulating the data to be transmitted in accordance with a first protocol to form a section. The section is then encrypted. The encrypted section is then supplemented with a section header and a section tailer. The encrypted supplemented section is then divided into a plurality of payloads in accordance with a second protocol. Transport stream headers are added to each payload to form packets. Claim 32 recites additional features.

By (a) supplementing the encrypted sections with a section header and a section tailer, (b) dividing the encrypted supplemented section into a plurality of payloads and (c) adding headers to each payload to form packets, as claimed in claims 20 and 32, the claimed invention provides a data transmission controlling method which allows the data to be transmitted with related

protocol requirements kept in tact and thus insuring security. The prior art does not show, teach or suggest the invention as claimed in claims 20 and 32.

Claims 20-24, 26-34 and 36-40 were rejected under 35 U.S.C. § 103 as being unpatentable over *Inoue, et al.* (U.S. Patent No. 6,163,843).

Inoue, et al. appears to disclose registration of a message from a mobile computer when the mobile computer moves outside a home network (Col. 8, lines 27-37). A portion of the registration message is encrypted (Col. 12, lines 39-40). A method for attaching authentication code to an IP packet is disclosed in IETF RFC 1826, 1828 so that authentication data between a mobile computer and a gateway of a visited network is attached to the data packet as processing for establishing the identification of the mobile computer (Col. 12, lines 49-55).

Thus, *Inoue, et al.* merely discloses encrypting a data portion within a packet. Nothing in *Inoue, et al.* shows, teaches or suggests (a) supplementing the encrypted section with a section header and a section trailer, (b) dividing the encrypted supplemented section into a plurality of payloads and (c) adding transport stream headers to each payload to form packets as claimed in claims 20 and 32. Rather, *Inoue, et al.* only discloses encryption of a data portion within a packet.

RFC 1825 at paragraph 3.2 discloses encapsulating an entire IP datagram or only an upper-layer of protocol data inside a ESP, encrypting most of the ESP contents and then appending a new cleartext IP header to the now encrypted Encapsulating Security Payload. Also disclosed at paragraph 3.1 are two cryptographic security mechanisms. The first is an Authentication Header and the second is an Encapsulating Security Payload. When the Authentication Header is used, fragmentation occurs after the Authentication Header processing.

Thus, RFC 1825 discloses two security methods, one in which fragmentation occurs after an Authentication Header processing (paragraph 3.1) and a second method using ESP in which a cleartext IP header is appended to an encrypted content (paragraph 3.2). Nothing in RFC 1825 shows, teaches or suggests (a) supplementing an encrypted section with a section header and a section tailer, (b) dividing the encrypted supplemented section into a plurality of payloads, and (c) adding headers to each payload to form packets as claimed in claims 20 and 32. Rather, RFC 1825 fragments after an Authentication Header processing, or appends a cleartext IP header to an encrypted encapsulated security payload.

RFC 1826 discloses at paragraph 1.1 Authentication Headers normally placed after fragmentation. Paragraph 3.2 discloses fields of the Authentication Header including a next header of 8 bits, a payload length of 8 bits and a reserve of 16 bits, a security parameter index of 32 bits and authentication data having an integral number of 32-bit words.

Thus, RFC 1826 discloses placing an Authentication Header after fragmentation as well as the structure of the Authentication Header. Nothing in RFC 1826 shows, teaches or suggests (a) supplementing an encrypted section with a section header and a section tailer, (b) dividing the encrypted supplemented section into a plurality of payloads and (c) adding transport stream headers to each payload to form packets as claimed in claims 20 and 32. Rather, RFC 1826 only discloses the placement and structure of the Authentication Header.

RFC 1827 discloses at paragraph 3. that the Encapsulating Security Payload (ESP) may appear anywhere after the IP header and before the final transport-layer protocol. The ESP consists of an unencrypted header followed by encrypted data. Paragraph 4. discloses that ESP processing occurs prior to IP fragmentation on output and after IP reassembly or input.

Thus, RFC 1827 only discloses ESP consists of an unencrypted header followed by encrypted data and that the ESP processing occurs prior to fragmentation. Nothing in RFC 1827 shows, teaches or suggests (a) supplementing the encrypted section with a section header and a section trailer, (b) dividing the encrypted supplemented section into a plurality of payloads and (c) adding transport stream headers to each payload to form packets as claimed in claims 20 and 32. Rather, RFC 1827 only discloses an unencrypted header followed by encrypted data and subsequent fragmentation.

A combination of *Inoue, et al.* and RFC 1825 – 1827 would merely suggest to encrypt a data position within a packet as taught by *Inoue, et al.*, to add an authentication header and fragmentation as taught by RFC 1825, to have the authentication header have the structure as taught by RFC 1826 or if ESP is used instead to attach an unencrypted header to the encrypted data prior to fragmentation as taught by RFC 1827. Therefore, since nothing in *Inoue, et al.* taken singularly or in combination with RFC 1825 – 1827 shows, teaches or suggests (a) supplementing encrypted section with a section header and a section trailer, (b) dividing the encrypted supplemented section into a plurality of payloads, and (c) adding transport stream headers to each payload stream to form packets as claimed in claims 20 and 32, Applicants respectfully request the Examiner withdraws the rejection to claims 20 and 32 under 35 U.S.C. § 103.

Claims 21-24, 26-31, 33-34 and 36-39 depend from claims 20 and 32 and recite additional features. Applicant respectfully submits that claims 21-24, 26-31, 33-34 and 36-39 would not have been obvious within the meaning of 35 U.S.C. § 103 over *Inoue et al.* and RFC 1825 – 1827 at least for the reasons as set forth above. Therefore, Applicant respectfully

requests the Examiner withdraws the rejection to claims 21-24, 26-31, 33-34 and 36-39 under 35 U.S.C. § 103.

Claims 25 and 35 were rejected under 35 U.S.C. § 103 as being unpatentable over *Inoue et al.* in view of *Takeda et al.* (U.S. Patent No. 6,178,244).

Applicant respectfully traverses the Examiner's rejection of the claims under 35 U.S.C. § 103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, Applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

As discussed above, since nothing in *Inoue et al.* shows, teaches, or suggests the primary features as claimed in claims 20 and 32, Applicant respectfully submits that the combination of the primary reference with the secondary reference to *Takeda et al.* will not overcome the deficiencies of the primary reference. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claim 25 and 35 under 35 U.S.C. § 103.

Thus, it now appears that the Application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested. Should the Examiner find that the application is not now in condition for allowance, Applicant respectfully requests the Examiner enters this amendment for purposes of appeal.

CONCLUSION

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to Deposit Account No. 50-0320.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 50-0320.

Respectfully submitted,

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